DOORPHONE 120™
WIRELESS DOORPHONE

MARMITEK®

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SAFETY WARNINGS

- To prevent short circuits, the handset should only be used only in dry spaces. Do not expose the components to rain or moisture.
- Do not expose the components of your systems to extremely high temperatures or bright light sources.
- In case of improper usage or if you have altered and repaired the product yourself, all guarantees expire. Marmitek does not accept responsibility in the case of improper usage of the product or when the product is used for purposes other than specified. Marmitek does not accept responsibility for additional damage other than covered by the legal product responsibility.
- This product is not a toy. Keep out of reach of children.
- Do not open the product (battery panel excepted): the device may contain live parts. The product should only be repaired or serviced by a qualified repairman.
- Keep batteries out of the reach of children. Dispose of batteries as chemical waste. Never use old and new batteries or different types of batteries together. Remove the batteries when you are not using the system for a longer period of time. Check the polarity (+/) of the batteries when inserting them in the product. Wrong positioning can cause an explosion.
- Only connect the adapter to the mains after checking whether the mains voltage is the same as the values on the identification tags. Never connect an adapter or power cord when it is damaged. In that case, contact your supplier.

TABLE OF CONTENTS

INTRODUCTION

Congratulations on your purchase of the digital wireless Marmitek DoorPhone120™.
Using this door phone, you can speak to the person at the door from any spot up to 150 meter of the house. If you also install the electric door opener, then you can even open the door remotely, without any wires involved. You can also link more handsets to your door unit. When using it in combination with the 4-doorbells door unit, each doorbell button will require its own handset. You can link several handsets to a single doorbell. The handsets that are linked to a single doorbell can also be used to communicate with each other (intercom function). For the best use and proper function of this equipment, it is important that you read this manual carefully and follow the given instructions. You need 4 x AA batteries for initial set-up.

1. SET CONTENTS
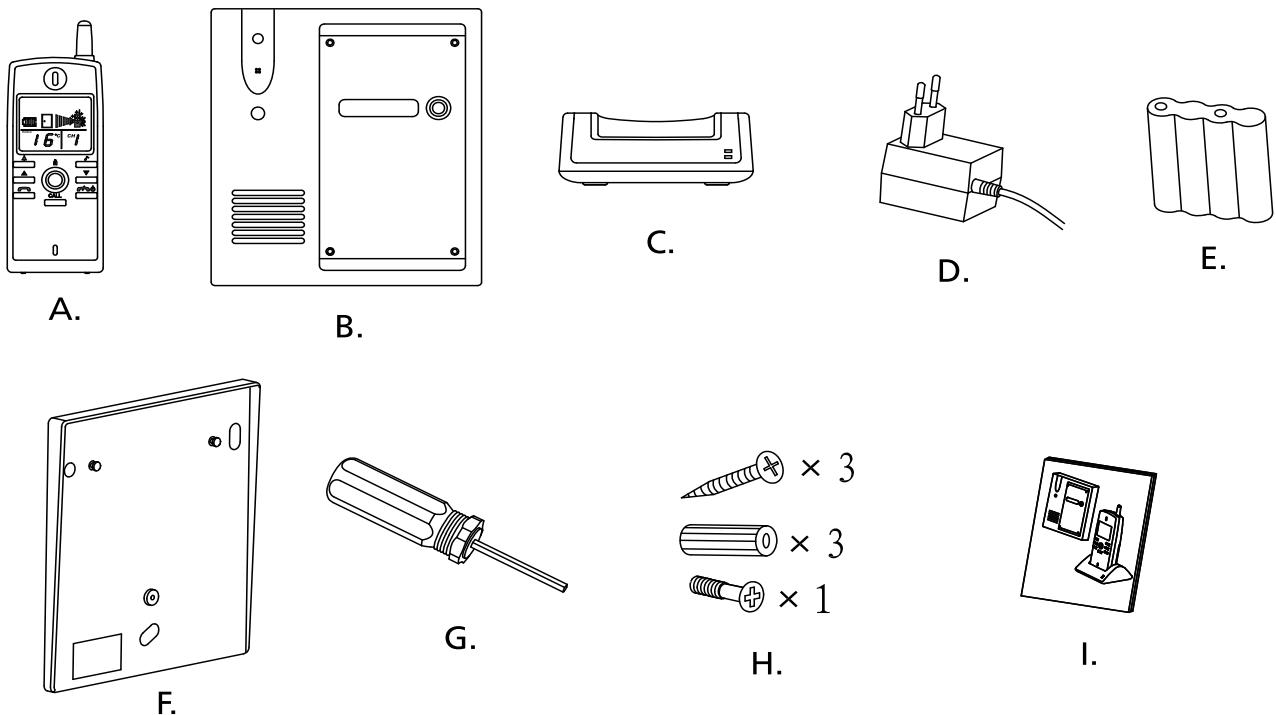
A: Handset   F: Wall mounting plate for door unit
B: Door unit   G: Special anti-theft/-sabotage tool (pentagonal)
C: Docking station   H: Screws en plugs
D: 2 x Power adapter   I: Manual
E: Rechargeable Ni-MH battery set

2. PROPERTIES

- Digital technique assures a practically distortion-free signal.
- Full Duplex function.
- Range up to 150m in free field, and up to 50m through walls and ceilings.
- Choice between ringtones, visual and/or vibration alarm for the handset.
- Outside temperature indicated on handset.
- More than 65.000 code combinations guarantee high level safety, privacy and prevention of disturbances from neighbouring systems.

- Optional remote controlled electric door opener.
- Sound and visual warnings on the handset for out-of-range and battery-low, given of the handset as well as the door unit.
- Intercom function possible between the handsets (extra handsets optionally available).
- Simple wireless installation possible.
- The door unit is supplied with an extra AUX connector which is activated when the doorbell is pressed, and can be used to link a conventional doorbell or to switch on the lights at the door/entrance, for example. (e.g. Marmitek X-10 www.marmitek.com)

Door unit
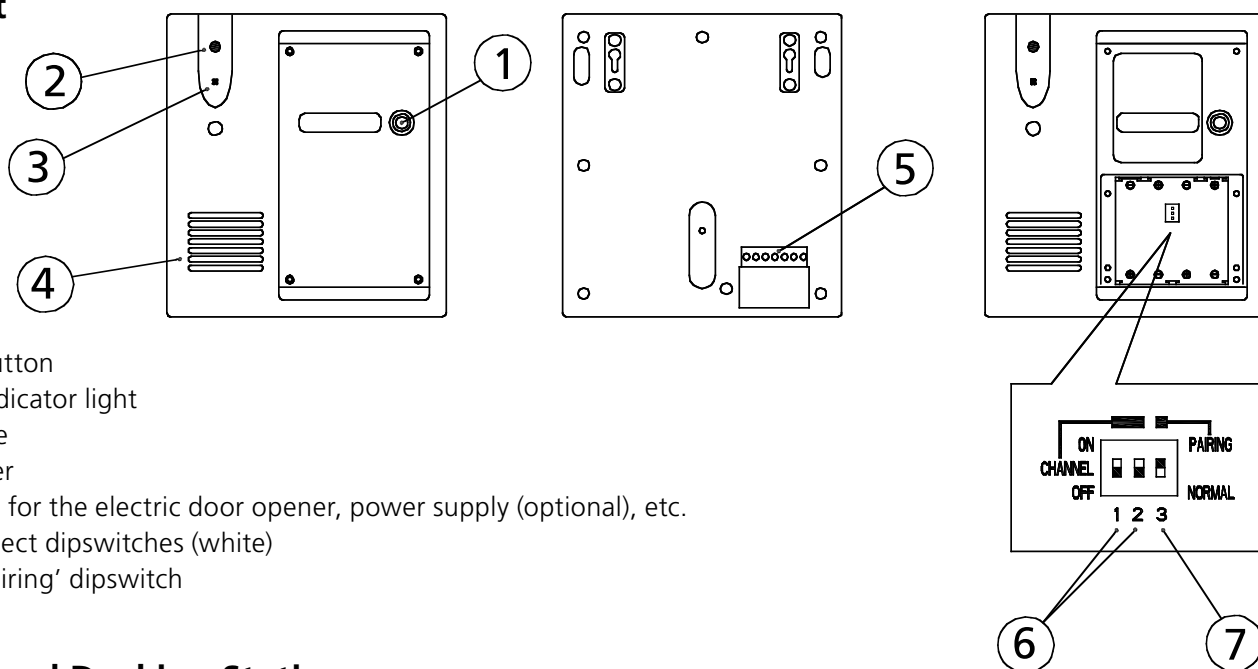
1 Doorbell button
2 Doorbell indicator light
3 Microphone
4 Loudspeaker
5 Connectors for the electric door opener, power supply (optional), etc.
6 Channel select dipswitches (white)
7 Log-on/ 'Pairing' dipswitch

Handset and Docking Station
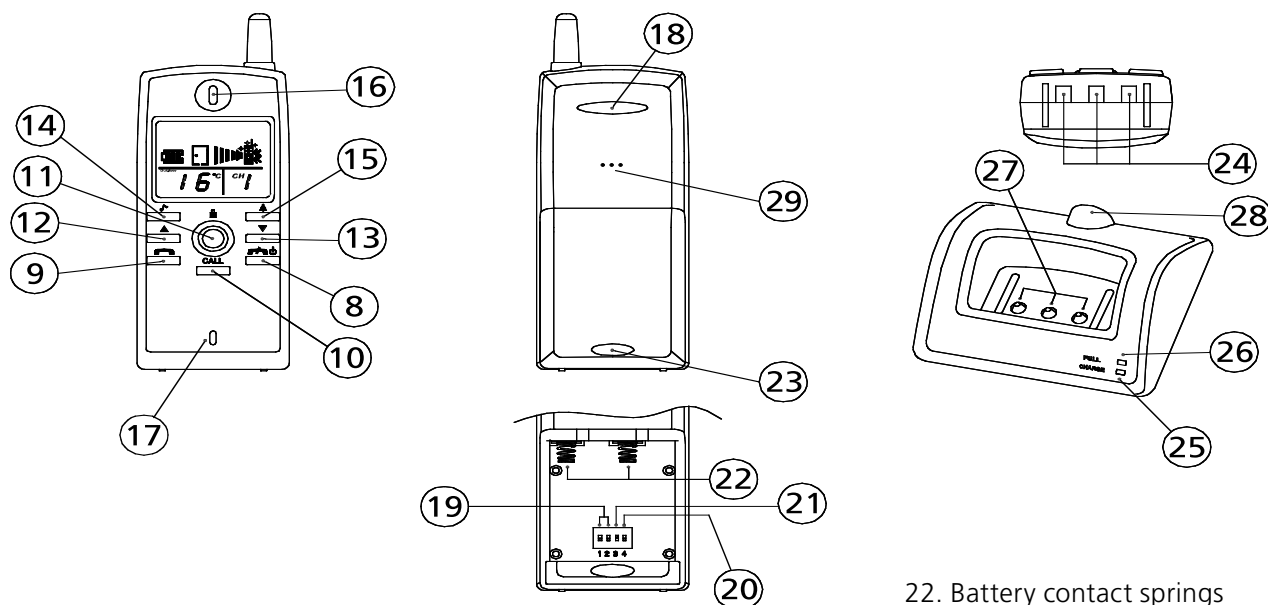
8. End conversation and on/off button
9. Speech button
10. Call button (call another handset)
11. Door-open button
12. Volume + button
13. Volume - button
14. Ring tones select button
15. Ring mode button
16. Loudspeaker opening
17. Microphone
18. Visual call indicator
19. Channel select dipswitch (white)
20. Door opener on/off select dipswitch (yellow)
21. Backdoor on/off select dipswitch (yellow)
22. Battery contact springs
23. Battery cover lock
24. Charger contacts
25. Charger indicator light
26. Battery-full indicator light
27. Charger contact points
28. Power adapter connection
29. Ringtone speaker

3. INSTALLATION

Before you get started with the installation, it is necessary that you fully charge the handset (4-5 hours).

Charge handset:

Figure 1

| A | B | C | D |
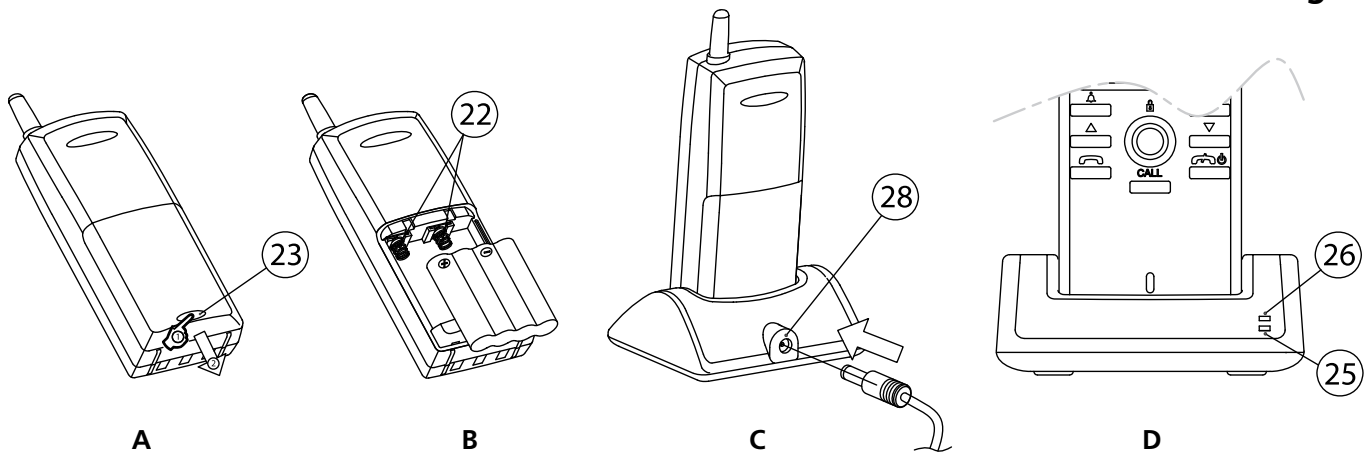
See figure 1

1. Remove the battery cover by pressing on the battery cover lock (23).
2. Insert the additionally supplied battery pack into the battery compartment. Make sure you connect the right polarities of the battery and the handset (22).
3. Place the battery cover back onto the handset. Beware! Do not put on the handset yet.
4. Insert the supplied power adapter into the connector at the back side of the docking station (28), insert the electric plug into the power socket and place the handset into the docking station.
5. The red 'Charge' indicator light (25) and the green 'Full' battery indicator light (26) should now go on and off alternately, which is to check the battery status. Shortly after that, only the red charger indicator light (25) will keep flickering. During the charging, the battery symbol 🔋 shall be visible in the LCD screen and the segments shall start moving to indicate that the handset is being charged.
6. After approximately 4 till 5 hours, the battery should be fully charged and the 'Full' battery indicator light (26) shall burn constantly. When the battery is fully charged, the battery symbol 🔋 will disappear when the handset is off.
7. The handset is now ready for further installation. It is advisable that the handset be placed in the docking station when not being used, so that it is always fully charged. This is not damaging the battery.

Getting the set ready for installation:

The door unit needs to be set on the same channel as the handset. Check the settings and adjust them if necessary, according to the instructions given below.

Note: - *You always need to place 4 AA Penlite batteries into the door unit for start-up, even when you will be using an external power supply (see 'Pairing procedure').*
- *In case you have more than one doorbell button on the door unit, then the channel settings are predetermined at the factory and cannot be altered. In that case you can skip the section 'Channel settings door unit'.*

3.1 Channel settings door unit (only for door units with a single doorbell button (1)):
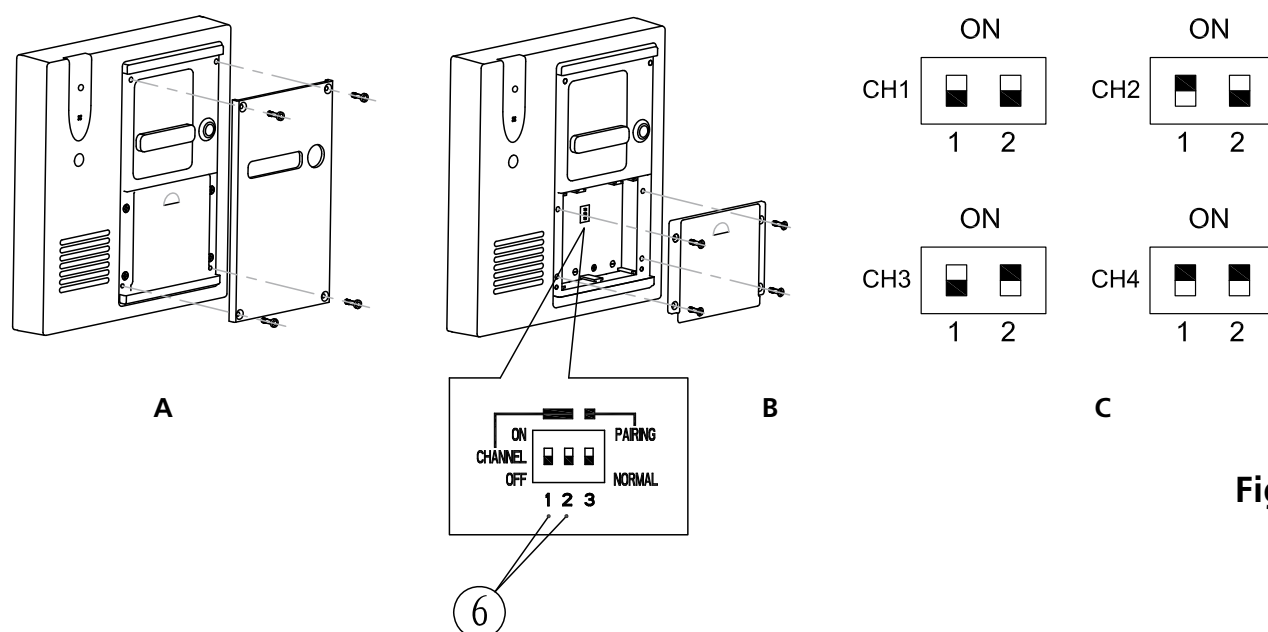
Figure 2

1. Loosen the 4 screws of the aluminium front panel using the supplied screwdriver. These screws have been designed such that they can only be loosened with this special tool, which is to prevent sabotage or theft. Keep this tool at a safe place.
2. Remove the aluminium front panel (Figure 2A).
3. Open the battery compartment by removing the rubber seal (Figure 2B).
4. You will now see the channel select dipswitches 1 and 2 (6). You can select the desired channel with the use of a pointed instrument such as a pen or a small screw driver (Figure 2C).
5. Dipswitch 3 shall be taken up in the next chapter.

3.2 Channel settings handset:
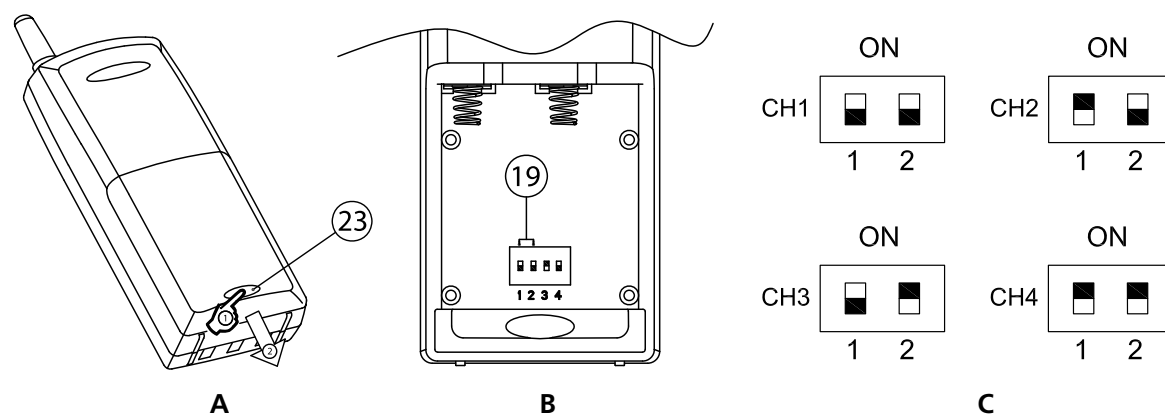
Figure 3

1. Remove the battery cover by pressing on the cover lock (23) and extract the battery pack (Figure 3A).
2. You will now see the channel select dipswitches 1 and 2 (19). You can now select the desired channel with the use of a pointed instrument such as a pen or a small screw driver.
3. Set the dipswitches on the same position as that of the door unit (Figure 3C). Beware! Wrong settings will result in the failure of the handset and door unit to communicate with each other. Dipswitch 3 should always be set on the 'OFF' position. Dipswitch 4 will be taken up later on.

4. Place the supplied battery pack into the battery compartment. Be careful about using the right polarity of the batteries and the handset (22) and place the battery cover back onto the handset.

In case you are using the handset(s) in combination with a 4-doorbells door unit, then you can set the handsets on channel 1, 2, 3 and 4 respectively. They should correspond with the door unit switches 1, 2, 3 and 4.
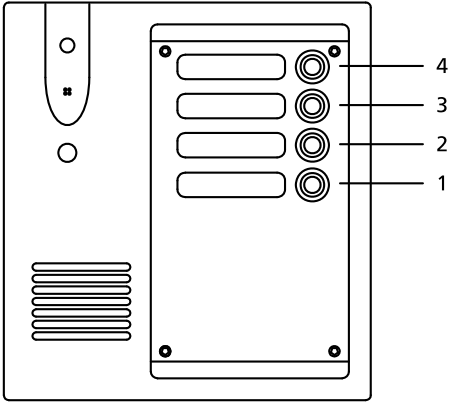
4. Pairing the handset(s) to the door unit:
The pairing procedure is essential for the set to function. Every door phone system is provided with a unique identity code (ID), so that only the handset and the door unit can communicate with each other. There are more than 65.000 different code combinations, so that the chance that someone else in your area has the same code is extremely small.

Beware! *It is necessary for the pairing procedure that the alkaline batteries in the door unit be fully loaded. In case the external power supply has already been connected to the door unit, then disconnect the power supply for the pairing procedure.*

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Follow the 5 steps given below for the pairing of the handset to the door unit.

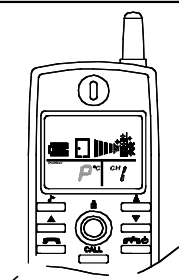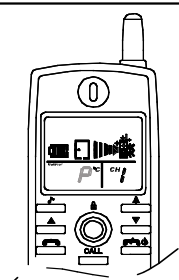| Handset | Door unit |

Step 1
Press and hold the buttons (8) and (9) at the same time for a few seconds to put on the handset. You will now hear a short beep. Release (8) and (9) buttons and you will hear a 2nd beep as confirmation.
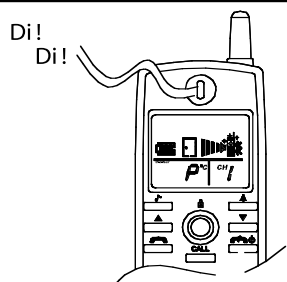
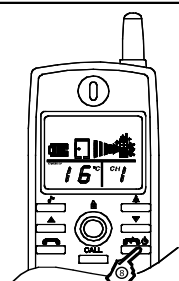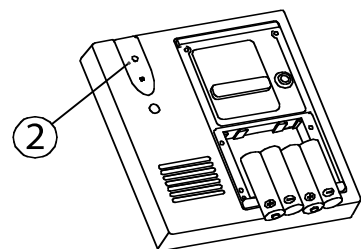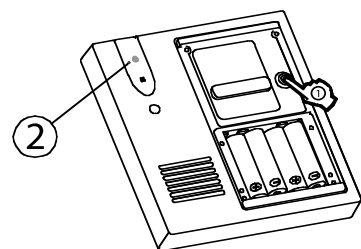Set the dipswitch 3 on the 'Pairing' position (7).

Step 2

Place 4 AA-alkaline batteries, keep in mind the right poles + and -. The doorbell indicator light (2) shall now burn constantly.

Step 3

Now press on the doorbell button (1) and the 'Bell' light will start flickering. A random ID code is now being generated and sent to the handset.
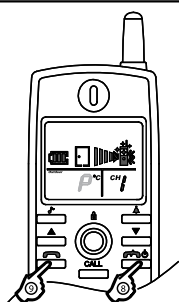
Step 4
The 'P' symbol will stop flashing when the ID code has been received.

Di!
Di!

Within 10 seconds, the unit will beep twice to indicate that the handset has received the ID code.

Beep!
Beep!

Step 5
After you hear the two confirmation beeps of the door unit, press on button (8) to go back to the normal display.
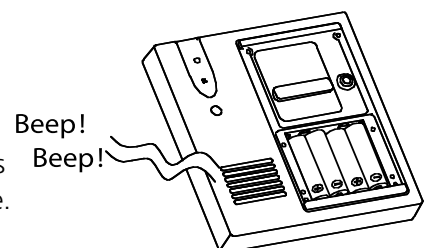
Take out the batteries and put the dipswitch (7) back to the 'Normal' position.
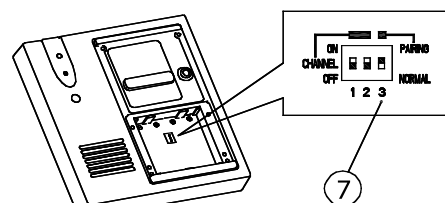
The pairing procedure has now been completed. To test the pairing function, place the batteries back into the door unit and press on the doorbell button (1). The handset should respond now.

If after you have logged on and you hear interference coming from other wireless devices in the neighbourhood, such as a mobile phone, then repeat the above mentioned procedure or switch over to another channel (when you change the channels, you will need to repeat the pairing procedure).

When the pairing has not been successful (the 'P' symbol on the LCD screen will flicker), then put off the handset and disconnect the power supply of the door unit by removing the batteries. Repeat the pairing procedure.

4.1 Copying the ID code to an extra handset:

Beware! *In case you have more than one handset, always first perform the pairing procedure with one handset only. Use the logged-on handset to copy ('clone') the ID to the extra handset(s). Every time you add an extra unit to the system, you need to copy the ID code to it; otherwise the system will not function properly.*

Follow the steps given below to copy the ID code onto an extra handset.

Make sure that the extra ('Slave') handset has been switched to the same channel as the primary ('Master') handset (see chapter 3.2:'Channel settings handset'). Tip! All 'Slave' handsets can be cloned to the 'Master' handset at the same time.
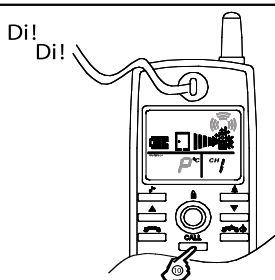
Logged-on handset 'Master'

Step 1
Press and hold the buttons (8) and (9) at the same time for a few seconds to put on the handset. You will now hear a short beep. Release (8) and (9) buttons and you will hear a 2nd beep as confirmation. You will see a 'P' flashing in the display.
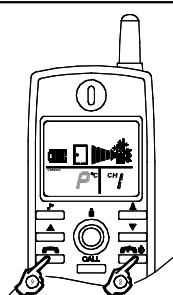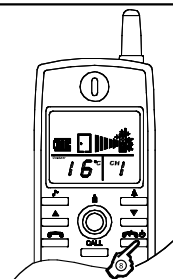
Step 2
Press on the call button (10) a symbol will appear on the display. The saved ID code is now being sent.
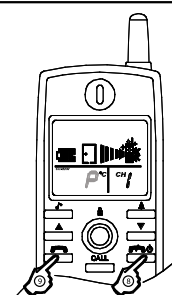
Step 3
Now press briefly on the on/off button (8) to return to the normal display.

To be cloned handset 'Slave'

Step 1b
Press and hold the buttons (8) and (9) at the same time for a few seconds to put on the handset. You will now hear a short beep. Release (8) and (9) buttons and you will hear a 2nd beep as confirmation. You will see a 'P' flashing in the display.
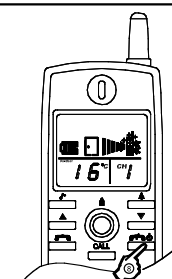
Step 2b
The 'P' shall stop flashing within 5 seconds after the 'Slave' handset has received the ID code, and will beep twice briefly to indicate that the cloning has been completed.

Step 3b
Now press briefly on the on/off button (8) to return to the normal display.

To activate the temperature reading, the batteries need to be removed from the door unit for the duration of 5 seconds.

5. INSTALLING THE DOOR UNIT

- Decide the best place for the installation of the door unit. The attachment surface should be as flat as possible; otherwise the unit will not fit properly onto the wall plate.
- It is advisable not to install the unit onto a metal surface or near other possible sources of interference, which could have negative influence on the system.
- Mark the spots to drill holes at, by making use of the holes in the plate, as shown in figure 4, and attach the plate to the wall. You can use the supplied screws and plug for the attachment of the plate.
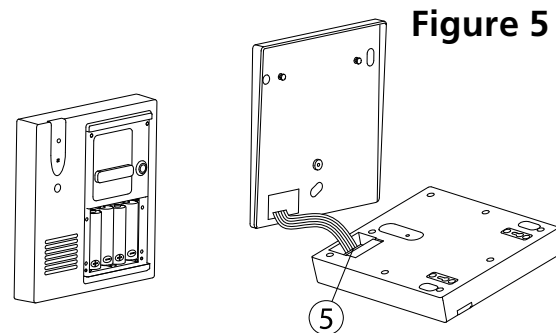

Insert riverts into holes (for concrete walls only).

Driled holes
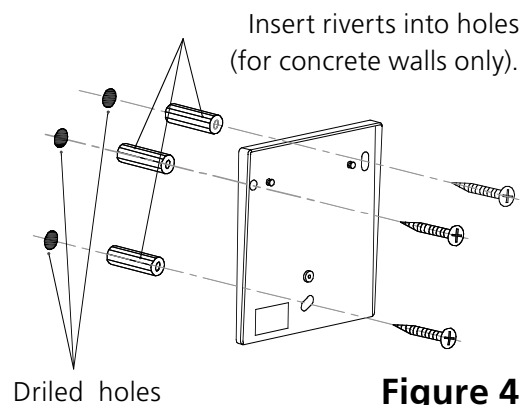
Figure 4

Figure 5

5.1 Connecting the power supply to the door unit:
The door unit can be powered in two ways.
1. Using batteries.
2. Using external power adapter.

1. Using batteries:
Insert 4 AA-alkaline batteries, keep in mind the right polarity + and -, in relation to the contact springs in the battery compartment. Use only new full alkaline batteries for reliable function (do not use rechargeable batteries).

2. Using external power adapter:
It is also possible to connect the door unit to the supplied external power. Connect the wires of the power adaptor to the connectors (terminals) at the backside of the door unit (5), these are marked with the $\lfloor_{8\text{-}12V}^{AC\sim}\rfloor$ symbol. When there are also batteries present in the door unit, then the batteries take over the function in case of power failure. Check the condition of the batteries regularly. Replace old batteries immediately. When an external power adapter is connected, the name illumination on the door unit will get activated automatically when it gets dark outside.

5.2 Connecting an electric door opener (optional):
- It is necessary for the installation of the electric door opener, that the door unit will be supplied with external power; otherwise the door-open function will not be active and therefore not usable.
- There are different connectors (terminals) on the backside of the door unit, for the installation of the door opener (maximum load 12V/1A). The voltage on these connectors is the same as that of the connected power adapter.
    1. A, B: 8~12V normally, 0V when triggered.
    2. A, C: 0V normally, 8~12V when triggered.

The electric door opener can be connected directly to the door unit of the Doorphone120 system (A,C); in this case the door opener is supplied by the door unit. Maximum load 12V/1A (additionally supplied power adapter 12VDC/600mA).

> *See the specifications of your electric door opener, to choose the socket and power supply.*

Max. 12V/1A (12V/600mA supplied).

Max. 12V/1A
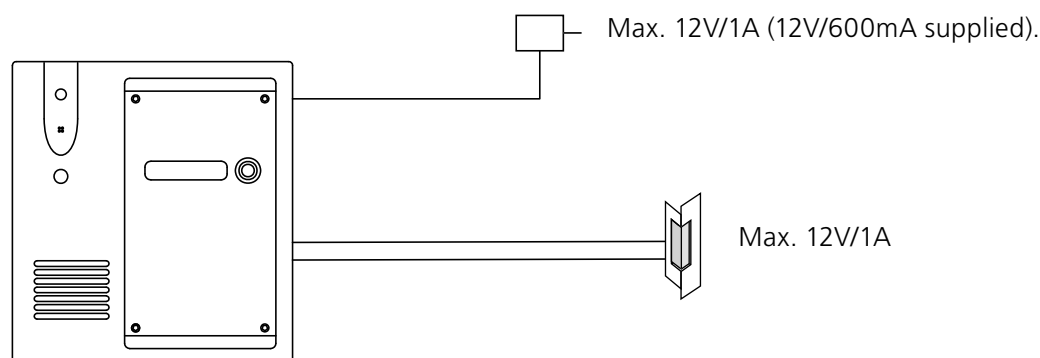
5.3 Use of AUX function (voltage-free/potential-free contact):

The door unit is provided with an extra AUX connector (5) which gets activated when the doorbell button (1) is pressed. Among other functions, this can be used for the activation of an (existing) conventional doorbell (1) or for switching on the lights in the door/entrance (maximum load 12V/200mA).

- Now that the door unit is connected, the wall mounting plate can be installed. Remove the batteries, place the door unit onto the metal nugs, and slide the unit upwards. Hold the unit firm in its place and screw it onto the mounting plate with the use of the cross-head screws in the battery compartment (Figure 7).
- Check if the Log-on dipswitch (7) is on the 'Normal' position and place the batteries back if there is no external power supply connected or otherwise as backup.
- Before you put back the rubber seal and the aluminium cover plate, you may want to put your name on the supplied name tag.
- Install the cover back as illustrated in figure 7. Make sure that the rubber seal is placed properly back onto the unit. Failing proper installation of the rubber seal will hinder the proper closure of the rest of the parts, thereby affecting the function and the lifespan of the unit.


Rubber seal
Name plate
Name plate cover
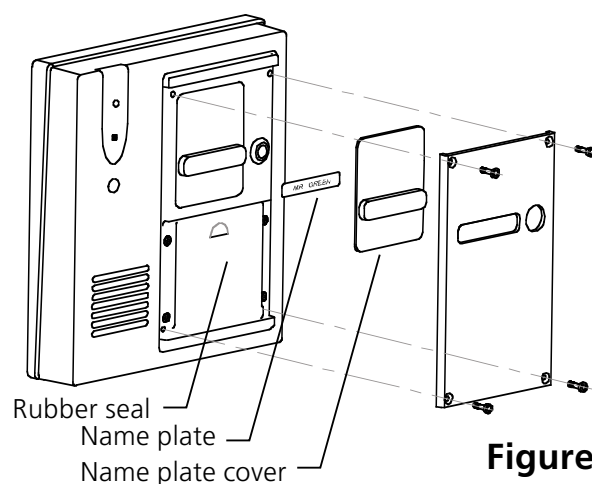
Figure 7

The door unit is made of an impact-resistant ABS/PC plastic and reinforced by an aluminium front panel. This door unit is extremely suitable for the most common outdoor situations.

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LCD Icons
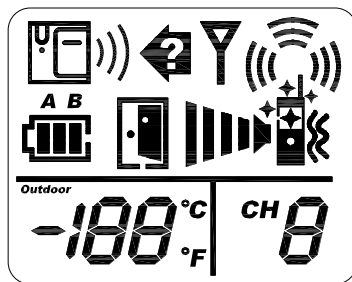
Light up constantly - flickering

Icon	Status	Icon	Status
A	Someone is at the front door	J	Ringtone and vibration selected
B	Someone is at the back door	K	Illumination and vibration selected
C	Missed call	L	Ringtone, illumination and vibration
D	Out of range	M	Door opener
E	Line busy	N	Battery low external unit
F	Ringtone selected	O	Battery low handset
G	Bell illumination selected	P	Battery level
H	Vibration function selected	Q	Volume
I	Ringtone and illumination selected		

6. APPLICATION

• Switch the handset on or off by keeping the on/off button (8) pressed and held for approximately 3 seconds.
• When switched on, the LCD screen shall illuminate.
• Now press the doorbell button (1) of the door unit. You will hear the ring tone and the door bell indicator light (2) will go on. The doorbell indicator light shall stay on until the handset is answered or the call is cancelled. When the handset is not answered, the door unit will stop calling automatically after 40 seconds and the doorbell indicator light will go off.

- As soon as the handset is answered, the door unit doorbell indicator light (2) shall burn constantly. The caller can communicate by speaking into the microphone (3). To prevent echo, there is a hands-free function built in, which makes sure that when a visitor speaks into the microphone (3) of the door unit, the loudspeaker (4) shuts off. **Beware!** This means when the visitor is speaking into the microphone, he will not be able to hear you, therefore wait with answering until the visitor has finished speaking.
- When receiving a call from the door unit, the symbol 📞 shall appear on the display. You can answer the call by pressing on the speech button (9). At the same time the symbol 📶 will appear on the display. From this moment on, it is possible to speak to the visitor.
- **Beware!** The system has a built-in conversation time limit of 60 seconds, which is for if you forget to break the connection after a conversation has ended. When you are reaching this time limit, you shall hear a signal tone. If required, you can extend the conversation time by another 60 seconds by pressing on the speech button (9). There is no limit to the amount of times you can extend the conversation.
- In case you have also connected an electric door opener, you can open the door during the conversation by briefly pressing on the door-open button (11). After approximately 4-5 seconds, the symbol 🔓 will appear on the LCD screen. This function can be switched on or off with the use of the Door open on/off dipswitch (20) on the handset. Furthermore, the door can only be opened when there is a connection between the handset and the door unit.

7. SPECIAL FUNCTIONS
- **Ringtones;** use the button (14) to choose the desired ringtone.
- **Ring mode;** use the button (15) to select the ring mode. Depending on your selection, symbols (F till L) will appear on the screen. Note; in case you select a combined function, the battery will need to be charged more often, at the cost of the battery's lifespan.
- **Loudspeaker volume;** using the buttons (12-13), you can adjust the loudspeaker volume of the receiver (16) during a conversation.
- **Extra door unit;** this function is not active. Make sure that the yellow backdoor on/off select dipswitch (21) is on the 'OFF' position. A wrong setting can result in a false notice 'Out of range'.
- **Not home;** when you have not answered a call from the door unit, the symbol 📲 will appear on the LCD screen. This symbol will alert you of the fact that someone has been at the door. Pressing on the on/off button (8) will make the symbol disappear.
- **Out of range;** when your handset is beyond the reach of the door unit, you will hear a signal and the symbol 📶 will appear on the display. Beware; this notice will not be activated as soon as you are out of range but rather when you are out of range for over 30 minutes. Pressing the on/off button (8) will stop the alarm temporarily, but the symbol 📶 will remain displayed. As soon as you are within reach of the door unit, the alarm will stop and the symbol will disappear.
  This signal will also appear when the batteries of the door unit are low, and if the external power supply fails or if the switch for the extra door unit is on the 'ON' position while there is no extra unit installed.

- **Battery life;** when used normally, the batteries of the door unit should last approximately 5-6 months. This depends on the use of the system. When the batteries are low, the symbol ⌂ shall appear on the display and a signal will be heard. Pressing the on/off button (8) will stop the signal temporarily, but the symbol ⌂ will remain displayed.
- **Outside temperature;** The outside temperature is displayed on the handset. During the installation of the door unit, the temperature will not be displayed on the handset, but after the installation is done, the temperature will appear.

8. INTERCOM

This function applies only with the use of 2 or more handsets. In that case it is necessary that all handsets are set to the same channel and have the same ID code (see 'Cloning').

Calling handset	Receiving handset(s)
Press on the 'Call' button (10) and you will hear the ringtone, also the symbol will appear.	When receiving the call, the ringtone will be heard.
Ringtone stops when the call in answered, you may speak now. If no one answers, the ringtone will stop after 20 seconds.	Press on the speech button (9) to answer the call. The ringtone will stop and the symbol will appear, you can now start to converse. You can also choose to press the on/off button (8) to ignore the call.
The conversation time is limited to 30 seconds, when reaching the end of this limit you will hear a beep. You can extend this time limit by another 30 seconds by pressing the speech button (9). There is no limit to the amount of times you can extend the time limit.	Conversation period cannot be extended with the receiving handset.
End the conversation by pressing on the on/off button (8).	End the conversation by pressing on the on/off button (8).

Calling selectively with a handset is not possible. When a handset makes a call, all other handsets (that are set to the same channel) will ring and can answer the call. The first handset that answers the call by pressing the speech button (9) will block all other handsets, and these will not be able to receive the call.

Beware! When two handsets are in conversation, it will not be possible to receive a call from the door unit.

9. FREQUENTLY ASKED QUESTIONS
Handset and door unit are not communicating
- The ID code is not set correctly. Repeat the pairing procedure.
- The channels are not synchronised. Set the handset and the door unit on the same channel and then repeat the pairing procedure.
- The batteries are low. Replace the door unit batteries or charge the handset.
- The yellow log-on dipswitch (7) on the door unit is still on 'Pairing'. Repeat the pairing procedure and set the switch to the normal position.

Range is reducing
- There are too many interfering sources (e.g. metal constructions) between the handset and the door unit. Place the handset at a different place for a stronger signal.
- The batteries are low. Replace the door unit batteries or charge the handset.

Out of reach indicator is always on
- The door unit is not getting powered. Replace the batteries or check the power adapter of the door unit.
- The back door on/off select dipswitch (21) is set on the 'ON' position. Set the dipswitch on 'OFF'.

Electric door opener is not functioning
- The Door open on/off select dipswitch (20) is set on the 'OFF' position. Set the dipswitch on 'ON'.
- You haven't used a power adapter for the door unit. Connect the power adapter.
- The connecting clamps are incorrectly connected. Connect them correctly.

The electric door opener sometimes functions and sometimes not.
- When you operate the electric door opener, in the display next to the battery indicator you will see the symbol of a closed door. Please do not hang up until you see that this symbol has changed into an open door.

Intercom is not functioning
- The ID code is not cloned correctly to the other handsets. Repeat the cloning procedure.
- The battery is (almost) empty. Charge the battery of the handset.
- The different handsets are set to different channels. Set the handsets on the same channel and repeat the cloning procedure.

Do you still have questions, please check out www.marmitek.com

10. TECHNICAL DATA
Handset
Power:	4,8v Ni-mH battery set
Charger:	9V 300mA
Power consumption:	Stand-by 25 mA
	Active 50 mA
Bell sound:	3 Programmable tunes
Channels:	1,2,3,4.
Dimensions:	52x142x32mm

Door unit
Range	Up to 150m in free field, up to 50m through walls and ceilings
Power	Battery (4x AA alkaline)

Power adapter	12 VDC, 600mA (supplied)
Frequency	863-865Mhz
Power consumption	Stand-by 2 mA
	Active 160 mA
Material	ABS / PC / Aluminium
Connection	External power 8-12V MAX 1A
	Make connection 8-12V MAX 1A
	Break connection 8-12V MAX 1A
	AUX connector MAX 12V/200mA
Ambient temperature:	- 10° C to + 60° C
IP value	IP54
Dimensions	150x158x35mm

11. OPTIONAL ACCESSORIES

Extra handset; article no. 09739.

You can link more handsets to one door unit. When using it in combination with the 4-rings door unit, every doorbell button that you use will need its own handset. You can also link more than one handset on a single doorbell button. You can also communicate (intercom function) with each other using the handsets that are linked to only one doorbell button. For more information see www.marmitek.com.